

CERTIFICATE OF MAILING			
I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231 on this date.			
Typed or Printed Name	Susan M. Alessi		
Signature	<i>Susan M. Alessi</i>	Date	August 20, 2002
INFORMATION DISCLOSURE STATEMENT Address to: Commissioner for Patents Washington, D.C. 20231	Attorney Docket	AGYT-011CIP2	
	First Named Inventor	MURRAY, JOSEPH	
	Application Number	10/090,698	
	Confirmation No.	5398	
	Filing Date	March 4, 2002	
	Group Art Unit	1637	
	Examiner Name		
Title: "AUTOMATED PATHWAY RECOGNITION SYSTEM"			

Sir:

This is an Information Disclosure Statement submitted for the Examiner's consideration. A Form PTO-SB/08A listing the references and copies of the cited references accompany this paper. Applicants would appreciate the Examiner's initialing and returning the form to indicate that the references have been reviewed and made of record.

Some of the references identified herein were disclosed in parent application serial number 09/365,587, filed 7/30/1999 and as such, copies thereof are not included pursuant to the provisions of 37 CFR § 1.98(d).

This Information Disclosure Statement is not intended as a representation that a search has been made, that additional information material to the examination of this application does not exist, or that any one of the above references constitutes prior art to the present application within the meaning of 35 U.S.C. §102.

As applicants have not yet received a first Action on the merits, no fee is believed to be required for filing this Disclosure Statement. If, however, the PTO finds that for some reason a fee is due, our Deposit Account No. 50-0815, Order No. AGYT-011CIP2 may be charged thereon.

Respectfully submitted,
BOZICEVIC, FIELD & FRANCIS LLP

James S. Keddie
By: _____
James S. Keddie, Ph.D.
Registration No. 48,920

Date: August 20, 2002

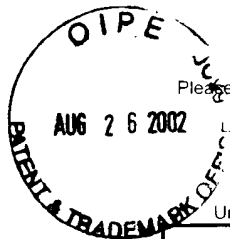
BOZICEVIC, FIELD & FRANCIS LLP
200 Middlefield Road, Suite 200
Menlo Park, CA 94025
Telephone: (650) 327-3400
Facsimile: (650) 327-3231

RECEIVED

AUG 28 2002

TECH CENTER 1600/2900

Please type a plus sign (+) inside this box ☐



PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>			Complete if Known		
			Application Number	10/090,698	
			Filing Date	March 4, 2002	
			First Named Inventor	MURRAY et al.	
			Group Art Unit	1637	
			Examiner Name		
Sheet	1	of	3	Attorney Docket Number	AGYT-011CIP

U.S. PATENT DOCUMENTS						
Examiner Initials ¹	Cite No. ¹	U.S. Patent Documents		Name of Patentee or Applicant of Cited Documents	Date of Publication of Cited Document MM-DD-YYYY	Pages, columns, lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
		5,593,839		Hubbell, et al.	01-14-1997	
		5,807,522		Brown, et al.	09-15-1998	
		5,942,399		Hillman, et al.	08-24-1999	
		5,966,712		Sabatini, et al.	10-12-1999	
		6,189,013		Maslyn et al.	02-2000	
		6,023,659		Seilhamer, et al.	02-08-2000	

FOREIGN PATENT DOCUMENTS							
Examiner Initials ¹	Cite No. ¹	Foreign Patent Documents			Name of Patentee or Applicant of Cited Documents	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Office ³	Number ⁴	Kind Code ⁵ (if known)			
			WO/9915626		Greenwald et al.	04-1999	

RECEIVED

☐

AUG 28 2002

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials [*]	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	
		ANDRADE, et al. "Automatic extraction of keywords from scientific text: Application to the knowledge domain of protein families", <i>Bioinformatics</i> , (1998) Vol. 14(7): 600-60.	
		ANDRADE, et al. "Automated extraction of information in molecular biology", <i>FEBS</i> , (2000) Vol. 476: 12-17.	
		BECKER, et al. "A graph layout algorithm for drawing metabolic pathways", <i>Bioinformatics</i> , (2001) Vol. 17(5): 461-467.	
		BROWN, et al. "Knowledge-based analysis of microarray gene expression data by using support vector machines", <i>Proc. Natl. Acad. Sci. USA</i> , (2000) Vol. 97: 262-267.	
		EISEN, et al. "Cluster analysis and display of genome-wide expression patterns", <i>Proc. Natl. Acad. Sci. USA</i> , (1998) Vol. 95: 14863-14868.	
		FRIEDMAN, et al. "Genies: A natural-language processing system for the extraction of molecular pathways from journal articles", <i>Bioinformatics</i> , (2001) Vol. 17(Suppl. 1): S74-S82.	

TECH. CENTER 1600/2900

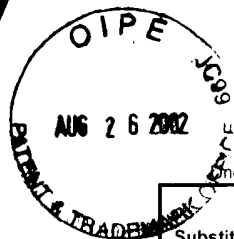
Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box →



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete if Known			
		Application Number	10/090,698		
		Filing Date	March 4, 2002		
		First Named Inventor	MURRAY et al.		
		Group Art Unit	1637		
		Examiner Name			
Sheet	2	of	3	Attorney Docket Number	AGYT-011CIP

+

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		FUKUDA, et al. "Toward information extraction: Identifying protein names from biological papers", <i>Proc. of the Pacific Symposium on Biocomputing</i> (1998): 707-719.	
		FUKUDA, et al. "Knowledge representation of signal transduction", <i>Bioinformatics</i> , (2001) Vol. 17(9): 829-837.	
		HUA et al., "Construction of a modular yeast two hybrid cDNA library from human EST clones for the human genome protein linkage map," <i>Gene</i> , 1998, vol. 215, no. 1, pp. 143-152.	
	/	HISHIKI, et al. "Developing NLP tools for genome informatics: An information extraction perspective", <i>Genome Informatics</i> , (1998) Vol. 9: 81-90.	
		HUMPHREYS, et al. "Automatically extracting enzyme interaction and protein structure information from Biological Science journal articles", <i>Proc. of the Symposium on Artificial Intelligence in Bioinformatics of the 2000 Convention of the Society for the Study of Artificial Intelligence and the Simulation of Behaviour</i> , (2000) (AISB-00), Birmingham, UK: 17-20.	
x		INGRAM et al., "Developing mouse models of aging: a consideration of strain differences in age-related behavioral and neural parameters," <i>Neuralbiology of Aging</i> , 1999, vol. 20, no. 2, pp. 137-145.	
		KRAUTHAMMER, et al. "Using BLAST for identifying gene and protein names in journal articles", <i>Gene</i> , (2000) Vol. 259: 245-252.	
		MARCOTTE, et al. "Mining literature for protein-protein interactions", <i>Bioinformatics</i> , (2001) Vol. 17(4): 359-363.	
	✓	MASYS, et al. "Use of keyword hierarchies to interpret gene expression patterns", <i>Bioinformatics</i> , (2001) Vol. 17(4): 319-326.	
	/	MROWKA. "A Java applet for visualizing protein-protein interaction", <i>Bioinformatics</i> , (2001) Vol. 17(7): 669-670.	
x		NEVILL-MANNING, Craig G., "Highly Specific Protein Sequence Motifs for Genome Analysis", <i>Colloquium Paper, Prof. Natl. Acad. Sci. USA</i> , (1998), Vol. 95, pp. 5865-5871	
	✓	NG, et al. "Toward routine automatic pathway discovery from on-line scientific text abstracts", <i>Genome Informatics</i> , (1999) Vol. 10: 104-112.	
		ONO, et al. "Automated extraction of information on protein-protein interactions from the biological literature", <i>Bioinformatics</i> , (2001) Vol. 17(2): 155-161.	

Examiner Signature		Date Considered	
-------------------------------	--	----------------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

RECEIVED

AUG 28 2002

TECH CENTER 1600/2900

Please type a plus sign (+) inside this box

AUG 26 2002

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete if Known	
		Application Number	10/090,698
		Filing Date	March 4, 2002
		First Named Inventor	MURRAY et al.
		Group Art Unit	1637
		Examiner Name	
Sheet 3 of 3	Attorney Docket Number	AGYT-011CIP	

+

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s).	T ²
		PROUX, et al. "Detecting gene symbols and names in biological texts: A first step toward pertinent information extraction", <i>Genome Inf.</i> , Vol. 9: 72-80 (1988).	
	/	RAYCHAUDHURI, et al. "Basic microarray analysis: Grouping and feature reduction", <i>Trends in Biotechnology</i> , (2001) Vol. 19(5): 189-193.	
	/	RAYCHAUDHURI, et al. "Associating genes with gene ontology codes using a maximum entropy analysis of biomedical literature", <i>Genome Res.</i> (2002) Vol. 12: 203-214.	
	/	RINDFLESCH, et al. "Mining molecular binding terminology from biomedical text", <i>Proc. AMIA Symposium</i> , (1999): 127-131.	
	.	SALAMONSEN, et al. "BioJAKE: A tool for the creation, visualization, and manipulation of metabolic pathways", <i>Proc. of the Pacific Symposium on Biocomputing 1999</i> , (1999).	
	/	SEKIMIZU, et al. "Identifying the interaction between genes and gene products based on frequently seen verbs in Medline abstracts", <i>Genome Inf.</i> , (1998) Vol. 9: 62-71	
	/	SCHATZ. "Information retrieval in digital libraries: Bringing search to the net", <i>Science</i> , (1997) Vol. 275(5298): 327-334.	
/	/	STEPHENS, et al. "Detecting gene relationships from Medline abstracts", <i>Proc. of the Pacific Symposium on Biocomputing</i> , (2001): 483-495.	
	/	TAMAYO, et al. "Interpreting patterns of gene expression with self-organizing maps: Methods and application to hematopoietic differentiation", <i>Proc. Natl. Acad. Sci. USA</i> , (1999) Vol. 96: 2907-2912.	
	/	THOMAS, et al. "Automatic extraction of protein interactions from scientific abstracts", <i>Proc. of the Pacific Symposium on Biocomputing</i> , (2000): 538-549.	
	/	WONG. "A protein interaction extraction system", <i>Proc. of the Pacific Symposium on Biocomputing 2001</i> , (2001): 1-11.	
	.	YOSHIDA, et al. "PNAD-CSS: A workbench for constructing a protein name abbreviation dictionary", <i>Bioinformatics</i> , (2000) Vol. 16(2): 169-175.	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

RECEIVED

AUG 28 2002

TECH CENTER 1600/2900